

METROPOLITAN IMPROVEMENTS.

Sir,—As an Englishman, I take a pride in London and its public buildings and monuments; and though we cannot expect an Augustus should arise to turn its brick into marble, yet we may perhaps be induced to exert ourselves so far as to remove some unsightly appearances, which are a reproach in the eyes of foreigners. With this hope, I beg permission to bring to notice two such offences against taste in the metropolis.

The first is the ugly stump in the central part of Westminster Abbey, which was intended to bear a tower, but which has never been finished according to the original design. Thus the monarchs of England and the Indies are crowned in a mutilated building! The ashes of the mighty dead, who have exalted this nation by their genius, wisdom, heroism, or powers, are not thought worthy of having a finished shrine to rest in! The house of God must hang down its head in presence of the Houses of Parliament! And whilst Cologne, a mere village in comparison with London, is doing justice to the noble design of its ancestors, the foreigner, as he passes along, points to the truncated tower of Westminster Abbey, and says—"Behold a nation which began to build, and is not able to finish," though a mere trifle is required for the purpose in proportion to our wealth, and compared with the actual demand for Cologne Cathedral.

Now, Sir, what is to prevent us from raising a tower, with a spire of light perforated architecture, upon the central base provided for that purpose? The foundation is sufficient, as those at the western end proved sufficient for Wren's superstructures; and if not, could be made so. And why should not the unorthodox disfigurements of that architect be retrieved and replaced by proper restorations?

The next reproach, which every one proud of his native land wishes to see removed from its chief city, is the want of quays along the bank of the Thames, on each side, in the manner of those on the Seine at Paris. The Thames is nothing more than the cloaca maxima of London, into which all the minor cloaca discharge their filth through the various vomitories that range along its banks; it is, therefore, like sailing up the common sewers when we enter London by the river; and foreigners may well be pardoned if they ask with a smile, "Are we proceeding to the Temple of Cloacina?" when they find themselves inevitably committed to the endurance of its offensive peculiarities. This subject was sometime ago taken up with spirit, but appears now to have subsided.

I would suggest, that instead of the face of the quay or pier towards the river being composed of solid masonry, rising like a wall out of the water, it should consist of a row of arches running along each bank, and forming a façade towards the Thames, like that of a first-rate viaduct in a railway. The advantages would be numerous, and amongst others much space might be gained; for the platform of the quay resting upon groins and arches, which admit the course of the stream uninterrupted beneath them, the river would not be compressed within narrower limits than before, nor the power of its tide increased; for the arches might be pushed forward even to low-water mark without injury. By this, also, all the unsightly and unsavoury nuisances which disfigure the banks would be covered over. Staircases also might be contrived within the arches, so as to keep the façade unbroken, and landing piers at the bridges; and, while the effect would be beyond what any other city can show, and worthy of London, the stream of traffic which chokes the parallel streets would be divided, and the delay of transit obviated.

Available space for a double line railway might be gained by such a pier or quay: but it will occur, "What is to be done at the crossings?"—for such a railway must cross the heads of bridges, &c. If no other way should occur, why not raise a second tier of arches carrying the railway, and resting upon the quay, so conveying the railway over the heads of the passing pedestrians, carts, &c. at the crossings, thus imitating a Roman aqueduct of two tiers or stories of arches, of which the lowest sustains the quay, the uppermost bears the rail-

way. Thus we should have a row of stout piers rising (suppose) from low-water mark, and from them arches springing, surmounted by a parapet, and bearing a platform of stone, which is "the quay." Upon these arches but perhaps a little retiring (and not carried up flush with the lower piers and parapet, but receding so as to leave a roadway or pathway along by the side of the parapet), you are to suppose a row of columns or piers rising high enough for the desired object, and bearing the railway from one end of the metropolis to the other, at least from Westminster Bridge as far east as practicable or desirable. The tunnel might form part of the plan, as affording a passage across the river at one end, and the Charing Cross Bridge might supply the foundations of another. But I am forgetting my description. You have, then, first the quay raised on a row of arches at low-water mark; secondly, the railway raised on arches resting on the quay, and passing over the heads of the people at the crossings; thirdly, a row of warehouses, in a good Italian or Roman style, built upon the quay, and rising up behind and above the railway two, three, or more stories, forming an embankment (as it were) for the railway to rest against on that side, and having street buttresses, corresponding to the pillars on the Thames side, for the support of the railway platform. The quay will thus be an arcade, with the exception of a clear roadway or footway between the pillars and the parapet of the quay; and this arcade will have openings into the warehouses, while the railway above will have the same.

As to "the cost," London can do any thing that money can command; and though it may appear much, I am persuaded it would even pay as a speculation, such is the amount of traffic.

Similar suggestions have long been before the public. We insert our correspondent's letter with the view of keeping such a project alive.

USE OF CEMENT IN CONSTRUCTION.

Sir,—The late melancholy occurrence and loss of life at the Euston-square Station, arising from the nonsetting of the cement used, has induced me to read, with much attention, the evidence reported in your paper. I perceive Mr. Hardwick's opinion to be, "that had the work been proceeded with in a dry season, in all probability the accident would not have occurred, and that it arose from the noninduration of the cement, owing to the excessive wet weather." I entirely differ with him on that point, knowing, as I do from experience, that good cement is never so much in its element as when used in damp weather; and I am prepared to support and prove the correctness of my opinion, either to Mr. Hardwick or any other architect or builder, by joining together with good Portland cement and sand, a given number of wet bricks, and keeping them moist for ten days or longer, and establishing at the end of the time that the bricks cannot, by any fair means, be disconnected at the joints from the cement; on the contrary, the bricks will break, whilst the cement will remain hard and firm in the joints. I observe one of the jurymen states as his opinion, "that had the work been done in April or May, the cement might have set in a few days, but at this season of the year it would not set in several weeks." This gentleman is evidently unacquainted with the nature and power of the material. The truth is, the failure of the works at Euston-square was entirely owing to the bad quality of the cement used; the columns at the station having been set in cement, would not, had it been good, have broken as described in the evidence; nor until coming in contact with the ground, and then only in the three or four pieces, arising solely from the breaking of the bricks. I differ also with Mr. Harwick in opinion, "that good cement should at all times be used immediately after it is prepared, and that by being left long, its adhesiveness is destroyed, and it becomes crumbly." The fact is, good cement never becomes crumbly. I have kept cement for four or five years, and afterwards, on its being exposed to the atmosphere, it has set twice as hard as when fresh from the manufactory. Having been practically connected with cement works and

building, and made numberless experiments with good Portland cement and brick, from my childhood, I assert, without fear of contradiction, that a cube foot of sound brick, set in good cement for ten days, is capable of sustaining a weight of 50 tons. It matters little which way the bricks are laid, if the material be good; provided the work be well walled and grouted, the structure will be one solid mass.

Apologising for this lengthened intrusion on your valuable columns, induced by nothing but a desire to serve the public, and not to prejudice any individual cement manufacturer, being, as I am, entirely ignorant by whom the cement was supplied for the building at the station,

I am, &c.,
Wm. ASPDIN,
Northfleet, Kent, Feb. 11, 1848.

PROVINCIAL NEWS.—BUILDINGS AND RAILWAYS.

THE second graving dock at Southampton is completed. —The plans of the new workhouse at Leicester have been approved of by the Poor Law Board. —The foundation stone of St. Thomas's Church, Coventry was laid on Thursday week; and that of the new church in All Saints district, Liverpool, on Monday week. The latter will be in the pointed style, with a spire and plain exterior: estimated cost, 4,000*l.*; Mr. Arthur Holme, architect; and Messrs. Duckworth, Nuttall, and Burroughs, builders. —St. Simon's parish church, Liverpool, was to be consecrated the end of last week or beginning of this. —The clearing of cellar occupancies at Liverpool is still going on; about 3,000 have now been vacated, but 11,000 still remain in the occupancy of 27,000 persons.

—The foundation stone of a new Wesleyan chapel has been laid at Cleethorpes. —The building called St. John's Seasonal Schools, at South Shields, is nearly completed, at a cost of 1,000*l.*, from working plans prepared by Mr. Thomas Oliver, of Newcastle; builder, Mr. George Young, South Shields. It is a plain edifice, with doors and windows in the modern Gothic style. The roof-interior is exposed in stained and varnished wood work.

—An operative chemist in Louth is said to have invented a self-illuminative rail-signal, to be attached to the rail by a strip of lead, and shew by the colour of the light produced while the engine passes over it the nature of the danger ahead. A contemporary also intimates the invention, at Louth, of a fixed machine which shuts off the steam of the engine in passing, whilst it blows the alarm-whistle, and might even be made to apply the brake. —In seven appeals to juries in Lincolnshire, the amount claimed by seven landowners, from the Great Northern, was 27,290*l.*, the sum offered was 12,076*l.*, and the amount awarded was 11,850*l.* —More bridges have been giving way before the ordinary test of winter's powers of wind and rain or frost and thaw. One recently constructed at Earley, on the Reading and Reigate line, succumbed on Friday week, ostensibly to a train of earth-waggons, but attributively to a heavy gale of wind and rain during the previous day. Another has also fallen at Hammerwick, near Lichfield, on the Smith Staffordshire line, now in course of construction. —The masons employed on the Tweed bridge struck work on Monday fortnight; and 160 of them, besides 50 labourers, are still idle. In November the wages had been reduced from 27*s.* to 24*s.* and 21*s.*, in consequence of the slackening in the demand for workmen and the shortening of the days; but now that the working hours are extended, the masons have demanded a return to 24*s.*, which the state of the demand for workmen does not appear to have warranted their employers in acceding to. —The railroad bridge between Hartford and Springfield, U.S., was rebuilt in one week, though 200 feet long. Yankee enterprise that! says the *American Sun*. Yankee enterprise truly, which no one, we hope, will seek to excel till the Hartford and Springfield bridge way is again open, as it no doubt shortly will be, to a repetition of the same smart experiment, and then our Yankee enterprisers, having no one else desirous to excel them in their own peculiar line, will no doubt feel impelled, by their own inimitable go-a-head-atrong impulses, even to excel themselves.